



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SHAKESPEARE, THE OBSERVER OF NATURE

By O. D. VON ENGELN, PH.D.

ASSISTANT PROFESSOR OF PHYSICAL GEOGRAPHY, CORNELL UNIVERSITY

OF Shakespeare's life, his personal habits, his ways of playing and working; with whom he was intimate and of his journeyings, we know little or nothing. But a host of editors, commentators, and essayists have examined all the minutiae of his environment, the plots, characters, and language of his works; much of it repeatedly. One is reminded by this diligence of the methods employed by the prefect's agents in Poe's tale of "The Purloined Letter." "Shakesperiana," as a result of all this research, far outstrips, in quantity at least, the literature which has thus far in the world's history ever accumulated about any other man and his work. Poor Will, should he awake to-day, and should he undertake the heroic task of editing all these writings, what a blue pencilling of pretty volumes there would be!

Yet this tangle of speculation and criticism, though full of weak and knotted strands, is in the main a literature we prize. While, therefore, it is difficult to find a Shakesperian theme that has not been interestingly and exhaustively discussed it does seem that the great writer's nature observations are worthy of a fuller treatment than has hitherto been accorded them. In the following paragraphs some attempt is made to show the range of subjects these cover, and their surprising accuracy in view of the crude state of scientific knowledge in Shakespeare's time.

Manners and customs change, and with them human points of view. By the inventions of three hundred years our social environment has been greatly altered. Yet the rich legacy bequeathed us by that grandest age of English literature, the sixteenth century, has enabled us to image Elizabeth's court and country with a degree of accuracy that is impossible with other remote periods in the history of modern civilization. But as some of the details in the picture, some of the essentials even, lack confirmation, our inferences may often be in error. Man varies his standards of conduct from year to year, but nature is a more staid dame—although she too changes her garb with the seasons, the cut and the cloth of the dress she assumes in each remains the same through the centuries. Thus the climate of Great Britain, the contour of her hills and vales are now as they were in Shakespeare's time. The same trees grow in the forests, among their branches flutter the same birds, on the forest-floor bloom the identical wild flowers that the poet's eye loved to dwell upon. If then we study the poet's nature lines and draw con-

clusions from them, we may be sure at least that the outdoor world has much the same aspect as it had in his day.

Editors in general express their amazement at Shakespeare's wonderful and accurate knowledge in natural science. Yet it is doubtful whether they collectively appreciate how wonderful this really was. They compare Shakespeare's observations with those of modern scientists and note that these agree. They judge Shakespeare's natural history in the same manner that they would that of a modern novelist and find it more than simply trustworthy. What this means can only be made apparent by an inquiry into the degree of progress in natural science that had been made up to his time.

Extremely curious fallacies were entertained and accepted by Shakespeare's scientific contemporaries, to say naught of the popular beliefs. Comparison of Shakespeare's observations with those which obtained in the published natural histories of his day enables us to realize how far he was in advance of the authors of such books. One such volume is Bartholomew's "De Proprietatibus Rerum," of which Mr. H. W. Seager, an English writer, says:

There can be no doubt that Friar Bartholomew's book was the standard authority on natural history in Shakespeare's time.

From Batman's translation of Bartholomew is quoted the following description of bees and their habits:

Many have assayed and found that often bees are gendered and come of carions of cattle. . . . And bees choose to their king him that is most worthy and noble in kindness and firmness, and most clear in mildness, for that is chief virtue in a king. . . . And kindly the more huge bees are the more lighter they be for the greater bees be lighter than the less bees. . . . Also bees sit upon the hives and suck the superfluity that is in honeycombs. And it is said that if they did not do so thereof should spiders be gendered of that superfluity and the bees should die.

Next consider Shakespeare's version:

For so work the honey bees,
Creatures that by a rule in nature teach
The act of order to a peopled kingdom.
They have a king and officers of sorts;
Where some, like magistrates correct at home,
Others, like merchants, venture trade abroad,
Others, like soldiers, armed in their stings,
Make boot upon the summer's velvet buds;
Which pillage they with merry march bring home
To the tent-royal of their emperor;
Who, busied in his majesty, surveys
The singing masons building roofs of gold
The civil citizens kneading up the honey,
The poor mechanic porters crowding in

Their heavy burdens at his narrow gate,
 The sad-ey'd justice, with his surly hum,
 Delivering o'er to executors pale
 The lazy yawning drone.

—“Henry V.,” Act I., s. 2, l. 187 et seq.

While this poetical account may not be wholly in accord with the observations of a Fabre, yet the whole description is sane, it is in no sense outré. If Shakespeare gives us so faithful an account in verse, where he is entitled to a poet's license in dealing with the facts, how accurate an interpreter he must have been; since he had to rely necessarily on his own observations for all such descriptions; contemporary natural science abounding in the grotesque vagaries cited above.

The country about Stratford-on-Avon was Shakespeare's haunt until his twenty-first year. Warwickshire, in which Stratford-on-Avon is located, is in the English Midlands. Of these the Avon district is notable for its soft, reposeful beauty. Every aspect has the appearance of being well rounded off, of being well fed. The land is a series of lowlying plains, separated by rolling hills, its surface suggesting that of a summer sea undulating in gentle swells. Through the lowest vale creeps the Avon water, whose slow advance along shore is all but stopped by the soft friction of the earth margin. In such quiet reaches extensive tracts of bulrushes grow luxuriantly. A fringe of yellow water-lillies generally marks the outer edge of this growth while on the shore side the green meadow grass bends down to meet the water. Where the banks are a bit higher the rich alluvial soil sustains a wealth of beautiful wild flowers. Shakespeare himself has described the stream for us:

The current that with gentle murmur glides,
 Thou know'st, being stopped, impatiently doth rage;
 But when his fair course is not hindered,
 He makes sweet music with th' enamell'd stones,
 Giving a gentle kiss to every sedge
 He overtaketh in his pilgrimage.
 And by so many winding nooks he strays
 With willing sport to the wild ocean.

—“T. G. of V.,” Act II., s. 7, l. 25 et seq.

To any one who has looked through the clear waters of some slow-flowing stream to its pebbled bottom, at a point where it tinkles with swifter motion over some slight descent, the application of the adjective “enamelled” must be fascinating. With a single word, Shakespeare images a page of description.

From the shores of Avon the land rises on both sides in gentle sweeps to the uplands, of which both the slopes and summits are dotted with stately clumps of oak and ash, the remnants of a once great forest. In Shakespeare's time, contemporary authors tell us, quite extensive tracts yet remained standing. The uplands from which the timber has

been cut are just high enough to be breezy, and from their ridges one commands quite a view of the surrounding country.

Amid such pleasant scenes Shakespeare's boyhood and youth was spent. Undoubtedly he had all a boy's love of sport, and with his school companions enjoyed many an outing in the woods and fields. On these outings he applied to natural phenomena the same intelligent observation, linked with imagination, that he was to apply so effectively in later life to men and events. As a boy and youth Shakespeare gained his nature lore, and acquired also the scientist's painstaking method of investigation. It must not be inferred from this that Shakespeare parted from nature for all time, when, at twenty-one, he rode away to London. But many of his observations are so essentially boyish, they exhibit so plainly the boy's point of view, that we can not mistake the time when these brain impressions were made. Experiences creep ever and anon into his writings that are curiously part of the career of a healthy-minded youngster rambling on half holidays through Warwickshire woodlands, and beside the Avon water. He tells us:

Men like butterflies
Show not their mealy wings but to the summer.
—“Troilus and Cressida,” A. III., s. 3, l. 78-9.

We all know of this *mealiness*, but we feel that it was never the observation of a grown man. Only the boy, whose thumb and forefinger have closed on the struggling captive, can duly appreciate the poet's conception. It is a boy too, who invites you:

I prythee, let me bring thee where crabs grow;
And I with my long nails will dig thee pignuts;
Show thee a jay's nest and instruct thee how
To snare the nimble marmozet; I'll bring thee
To clust'ring fibberts and sometimes I'll get thee
Young seamels from the rock. Wilt thou go with me?
—“Tempest,” A. II., s. 2, l. 171 et seq.

No one could resist such an invitation. Again it is possible that the deer-stealer of later fame is foreshadowed in the youthful poacher who knew

The trout that must be caught with tickling.
—“Twelfth Night,” Act II., s. 5, l. 25-6.

Other passages charmingly present the boy. We can not do better than suppose ourselves permitted to accompany the poet and a party of his schoolboy friends, out for an all-day ramble. According to agreement, we meet early.

The lark at break of day arising
From sullen earth, sings hymns at heaven's gate.
—Sonnet XXIX.

and

The busy day
Wak'd by the lark, hath rous'd the ribald crows.
—“T. and C.,” A. IV., s. 2, l. 8 et seq.

for these the

Merry larks are ploughmen's clocks.
—“L. L. L.,” A. V., s. 2, l. 912.

and to their music we wend our way through

The quaint mazes in the wanton green

past the

Nine-men's morris.
—“M. N. D.,” A. II., s. 1, l. 99, 98.

to the edge of the village common. We avoid the highway, choosing, instead, to follow one of those byways for which England is famous; byways that respect no man's vested right, but cross the midst of fields and turn not aside at the hedge of a private park, for they assert emphatically, as one writer has put it:

That although the land is yours when you buy it, the outlook from every point belongs to the people, and can not be bought!

In the dewy grass beside the path we chance upon a snail and find by experiment that he, his

Tender horns being hit,
Shrinks backwards in his shelly cave with pain,
And there all smother'd up, in shade doth sit,
Long after fearing to come forth again.
—“Venus and Adonis,” l. 1033 et seq.

Shakespeare's vivid memory of this incident enables him to introduce, without any incongruity, so homely a creature when his theme is love, moreover to use it in a comparison. In “Love's Labour Lost,” Berowne declaims

Love's feeling is more soft and sensible
Than are the tender horns of cockled snails.
—A. IV., s. 3, l. 337-8.

When at noon we find that

The sun shines hot.
—“H. VI.,” Pt. 3, A. IV., s. 8, l. 60.

we turn into the woods where

The green leaves quiver with the cooling wind
And make a chequer'd shadow on the ground.
Under their sweet shade.
—“T. Andron.,” A. II., s. 3, l. 14 et seq.

we loll, while Shakespeare weaves for us a thousand fancies. All too soon

The sun begins to gild the western sky.

—“T. G. of V.,” A. V., s. 1, l. 1.

and we must turn on our homeward way. English twilights are long, and the yellow slanting beams from the low-hung orb of day twinkle and gleam among the path-bordering-trees for hours. In this golden light dance the gnats so fast, so furiously, disappearing so mysteriously, that Shakespeare propounds

And whither fly the gnats but to the sun?

—“H. VI.,” Pt. 3, A. II., s. 6, l. 9.

a query no one of us can answer. In silence we trudge the last few miles while:

The crickets sing, and man’s o’er labour’d sense
Repairs itself by rest.

—“Cymbeline,” A. II., s. 2, l. 11.

It were easy to multiply such pages from Shakespeare’s life and the task is a delightful one. One can not fail to be impressed again and again by the acuteness and accuracy of his observations. When one essays to group these references under their different heads, one first realizes how extensive was his acquaintance with nature, animate and inanimate. The animal kingdom he brings oftenest to our attention. All the reptiles which were native to Warwickshire he knew; modern investigators have not been able to add to the number which Shakespeare notes in his poems and plays. In other phases of natural history he was equally well versed; to appreciate this we have only to examine his work systematically.

Alexander Pope declared of Shakespeare that:

Whatever object of nature . . . he speaks of or describes it is always with competent if not with extensive knowledge; his descriptions are still exact, all his metaphors appropriated and remarkably drawn from the true nature and inherent quality of each subject.

This appreciation applies in its fullest force to Shakespeare’s knowledge of birds. In this branch of nature lore he displays, indeed, the most exact and extensive learning. There are several reasons for this. The vale of Avon furnished exceptional incentives for the development of an ornithologist, because of the number of species that could be observed there. Other than the varieties of land-birds which regularly resorted to the meadows and woods of the Warwickshire country, seabirds, driven inland from the coast by heavy southwest gales, followed the course of the Avon as far as Stratford, and remained in that vicinity several days before again winging their way back to the shore. In spring and fall

migratory birds of many kinds halted there during their north and south flights.

Yet the variety of bird life found in Warwickshire only in part accounts for Shakespeare's great birdcraft. A very important factor in its acquisition was the great vogue of falconry in those days.

It is hard for us to conceive how widely popular this sport, now almost obsolete, was at that time. Mr. J. E. Harting, a British ornithologist, writes:

In Shakespeare's time every one who could afford it kept a hawk, and the rank of the owner was indicated by the species of bird he carried. To a king belonged the gerfalcon; to a prince the falcon gentle, to an earl the peregrine, to a lady, the merlin; to a young squire, the hobby; while a yeoman carried a goshawk; a priest, a sparrowhawk; and knave or servant a kestrel.

A well-trained hawk was as much a source of pride to the falconer as a skillful hunting dog is to the modern sportsman. That Shakespeare was well versed in this pastime is evident from the numerous references to it which occur in his work, and from the number of its technical terms which he employs. Many of these direct allusions to falconry are interesting in themselves.

As confident as is the falcon's flight
Against a bird!

—“Rich. II.,” A. I., s. 3, l. 61.

he exclaims, and in “King Henry VI.” we have the old sportsman's chronic failing, his fondness for patronizing comments—expressed by Cardinal Beaufort:

Believe me, cousin Gloucester,
Had not your man put up the fowl so suddenly,
We had had more sport.

—“H. VI.,” Pt. 2, A. II., s. 1, l. 45 et seq.

Similar passages are numerous in fact, the first part of this scene is altogether devoted to falconry talk, and abounds in the jargon of that craft.

As may be inferred, not all birds, to use the parlance of the day, were “flown at,” moreover, certain birds were the prerogatives of the great. Among these may be mentioned the heron. This came about partly because such birds afforded better sport; also because the meaner species of hawk, that people of lower rank carried, could not cope to advantage with such large quarry. These restrictions only tended to make the devotee, whate'er his class, more observant of all the birds that came within his view. Such riveting of the attention must have keyed Shakespeare's powers of observation to the highest pitch. Where other falconers may have dismissed the unavailable bird with a glance, he no doubt beguiled his waiting for desired quarry by noting the habits

of those species that had nothing to fear from his hawk. Hunters to-day find game that is out of season most plentiful, and in all likelihood the rule held good in the sixteenth century. Yet it is wonderful how many kinds of birds Shakespeare knew.

He mentions all the species having popular names. We may well infer that he was acquainted with many more, for it must be remembered that Shakespeare was in some degree, no doubt, obliged to confine his allusions to species that were familiar to his audience. Yet he finds occasion to mention the eagle, buzzard, osprey, the different kinds of owls, the pelican, crow, raven and woodpecker, the magpie, jay, thrush, blackbird and bunting, the cuckoo, robin, sparrow and wren, the dove and the partridge. Besides these there are birds distinctively mentioned as flown at, the lapwing, the woodcock and snipe, also wild geese and duck. Of distinctly sea birds the guillemot and the cormorant are cited. The aptness and truth of the references he makes to these denizens of the air shows how conversant he was with their ways. What modern playwright or poet knows half this number of species well enough to use them in his diction?

The lark seems to have been a favorite with Shakespeare. It is mentioned again and again, and almost always associated with the morning.

Lo! here the gentle lark, weary of rest,
From his moist cabinet mounts up on high
And wakes the morning, from whose silver breast
The sun ariseth in his majesty.

—“*Venus and Adonis*,” l. 853 et seq.

The blackbird he describes as

. . . so black of hue
With orange tawny bill.

—“*M. N. D.*,” A. III., s. 1, l. 131-132.

The young of the lapwing “run almost as soon as they are hatched” we are informed by ornithologists, and Shakespeare has noted this peculiarity.

This lapwing runs away with the shell on his head.

—“*Hamlet*,” A. V., s. 2, l. 193.

Perhaps the best way to show how intimately Shakespeare knew the facts will be to examine his so-called errors and especially one that has attracted some attention in the past, and apparently taxed the resources of commentators to explain. In several plays Shakespeare ascribes a certain habit to the cuckoo. These quotations are given below in their chronological order.

Why should the worm intrude the maiden bud?
Or hateful cuckoos hatch in sparrows’ nests?

—“*Lucrece*,” l. 848-9.

And being fed by us you us'd us so
 As that ungentle gull, the cuckoo's bird,
 Usest the sparrow; did oppress our nest;
 Grew by our feeding to so great a bulk. . . .

—“Henry IV.,” Pt. 1, A. V., s. 1, l. 58 et seq.

But since the cuckoo builds not for himself.

—“Ant. and Cleo.,” Act. II., s. 6, l. 28.

For you know, nuncle
 The hedge-sparrow fed the cuckoo so long,
 That it had it head bit off by it young.

—“Lear.,” Act I., s. 4, l. 237 et seq.

An investigation of these passages proved extremely diverting because of the varied ways in which the different critics and Shakespearian editors tried to explain, dodge or ignore the question—Was Shakespeare at fault in accrediting such habits to the cuckoo?

In the lines from “Lear,” moreover, two disputed textual passages occur. The Globe edition has the last line:

That it had it head bit off by it young

which is awkward and meaningless. This line some other editions boldly change to just the opposite and have two “its,” reading:

That it had its head bit off by its young.

Furness in the Variorum edition inclines to the reading

That it's had it head bit off by it young.

explaining his “it's” as a contraction for it has, which would seem to give sense to the passage, *i. e.*, that it (the sparrow) has had it (the sparrow's) head bit off by it (the cuckoo) when still young.

Again in the case of the phrase “For you *know* nuncle” the Globe reading and the Variorum edition agree on the above; (nor is there anything said about a different reading in the Variorum). Yet Schmidt in his Shakespeare Lexicon defines “*trow* = believe” for this passage; and so it is printed in Knight's edition of Shakespeare's works. Now let us see what the commentators have to say regarding the natural history of the lines.

Mr. J. E. Harting, the ornithologist, after quoting all three passages, dodges the issue:

The solution of this question is the more puzzling from the fact that this parasitical habit is not common to all species of the genus cuckoo. An American species builds a nest for itself and hatches its own eggs. The habits of our English bird must always be as much a marvel to us as its remarkable voice, etc.

Mr. Chas. Knight, the Shakespearian editor, pins his faith to “*trow*,”

adopting this reading without question and triumphantly champions the poet as follows:

There is a remarkable instance in his (Shakespeare's) discrimination between the popular belief and the scientific truth in his notice of the habits of the cuckoo. The Fool in "Lear" expresses the popular belief in a proverbial sentence:

For you trow nuncle
The hedge sparrow fed the cuckoo so long
That its had its head bit off by it young.

Worcester, in his address to "Henry IV.," expresses the scientific fact without the vulgar exaggeration, . . . a fact unnoticed until the time of Dr. Jenner by any writer but the naturalist William Shakespeare:

And being fed by us you us'd us so
As that ungentle gull, the cuckoo's bird,
Useth the sparrow; did oppress our nest,
Grew by our feeding to so great a bulk. . . .

Mr. J. E. Harting, some half dozen pages after his first dismissal of the subject, recurs to it again:

The opinion that the cuckoo made no nest of its own but laid its eggs in that of another bird, which brought up the young cuckoo to the detriment of its own offspring, was well known to the ancients and is mentioned by Aristotle and Pliny.

The more recent scientific discussions of this bit of natural history are interesting reading, in view of the decided differences of opinion among the commentators. The Victoria History of Warwickshire, because of the thorough manner in which the various subjects are treated, is a valuable reference book on Shakespeare's native county. The section on the Ornithology of Warwickshire was written by Mr. R. T. Tomes, F.G.S. and corresponding mem. Z. S., who under the head of "the cuckoo" (although he makes no reference to Shakespeare) has the following sentence:

I have long been of the opinion that the female cuckoo lays her eggs on the bare ground, from which she takes them in her beak and places them in the nests of other birds.

He cites instances when he has observed this transference of the egg.

Other British ornithologists, in general, believe that the cuckoo not only deposits its egg in some smaller bird's nest, but also that the cuckoo fledgeling, by an upward jerk of its rump, hurls the true offspring of its foster parents from the nest; and itself grows so large before leaving this that the foster parents are compelled to perch on the fledgeling's shoulders, in order to convey food to its gluttonous maw. Under the circumstances is it not a plausible enough theory, that Shakespeare did witness some such tragedy as is indicated in the Fool's lines;

and that he therefore needs no learned etymological or ornithological defense?

The other so-called natural history errors of Shakespeare are probably enough, as Mr. Knight contends, due to his reliance on books; as Knight puts it:

Shakespeare derived his nature truths from observation, his untruths from books.

Such errors are:

The toad, ugly and venomous,
Wears yet a precious jewel in his head.
—“As Y. L. It,” A. II., s. 1, l. 13-4.

Now I will believe . . .
That . . . in Arabia
There . . . is one phoenix.
—“Tempest,” A. III., s. 3, l. 22 et seq.

Knight, curiously enough, in view of his elucidation of the cuckoo episode, fails to note in this connection the rather obvious fact, that such errors are given as beliefs of the characters who express them, or, indeed, as expressions of their own skepticism, as in the case of the phoenix, and are, not therefore, to be construed as accepted by Shakespeare himself.

The limitations of this paper preclude considering in detail all the divisions of natural history that Shakespeare knew at first hand. It must suffice that we pick out several of the more noteworthy for examination. As in the case of the birds, Shakespeare's insects attract attention because of the remarkable number of species mentioned.

When we think of the very small number of insects that the average person, to-day, can call by name, how many less he knows, or remembers the habits of, and that even now only a very small proportion of the classified species have popular names; we can better appreciate the range and quality of that man's observations, who in the city, far from their haunts, wrote about, from memory, almost all the species possessing popular names, that were native to his youthful home. Mr. Robert Patterson, an entomologist (Treasurer of the Natural History Society of Belfast), found that the passages in Shakespeare containing notices of insects occupied “nine closely written pages of letter paper.” He has not printed this list, but we may surmise from his language that he considered it extensive, in fact he says elsewhere that he was “surprised at the amount of natural history contained in the plays.”

It needs only a short search to come upon a passage revealing more than a merely superficial knowledge of this topic. If a modern entomologist were made a dramatist, he could not better voice scientific fact than Shakespeare has in the lines:

There is differency between a grub and a butterfly; yet your butterfly was a grub.

—“Coriolanus,” A. V., s. 4, l. 12-13.

It can not be too often reiterated that nature knowledge, such as displayed in this sentence, was nothing less than extraordinary in a sixteenth-century poet. Because the phases of the butterfly’s life history are commonly known to-day, we are apt to pass over the expression without thinking of its real import—that at a time when natural history abounded in absurdities and superstitious beliefs, this man stated the facts. Again his uses of these facts and keen observations are at times imaginative to a fascinating degree. When Mamillius in “The Winter’s Tale” whispers:

I will tell it softly;
Yond crickets shall not hear it.

—Act II., s. 1, l. 29-30.

his conception of the crickets as listeners, because they cease their clamorous chirpings, remaining absolutely silent as long as you converse in their vicinity, is a very pleasing fancy.

When the sun shines let foolish gnats make sport,
But creep in crannies when he hides his beams.
—“Com. of Errors,” Act II., s. 2, l. 30-31.

And often, to our comfort, shall we find
The sharded beetle in a safer hold
Than is the full wing’d eagle.

—“Cymbeline,” Act III., s. 3, l. 19 et seq.

are on the other hand passages embodying bits of philosophy which might well have found place in Bacon’s essays.

There are, in other of these insect passages, unrivalled quaintness and suggestiveness. No other poet has surpassed in imagery the conceits Shakespeare has made familiar in the description of Queen Mab’s chariot and its fittings.

Her chariot is an empty hazelnut
Made by the joiner squirrel or old grub,
Time out o’mind the fairies’ coach-makers.
(Its) . . . wagon-spokes made of long spinner’s legs
The cover, of the wings of grasshoppers
The traces, of the smallest spider’s web.
Her whip, of cricket’s bone; the lash of film;
Her waggoner, a small grey-coated gnat.

—“R. and J.,” A. I., s. 4, l. 60, etc.

Here must be inserted too that queer stanza:

The fox, the ape and the humble-bee
Were still at odds, being but three,

Until the goose came out of door
 And stay'd the odds by adding four.
 —“L. L. L.,” A. III., s. 1, l. 90 et seq.

This is sheer nonsense and would adorn Lewis Carroll's “Alice's Adventures in Wonderland.”

Passing from animate to inanimate nature, we think first of flowers, the beautiful things of creation. Perdita's speech in “The Winter's Tale,” so often quoted, claims first attention:

O Proserpina!
 For the flowers now that frighted thou let'st fall
 From Dis's waggon! daffodils,
 That come before the swallow dares, and take
 The winds of March with beauty; violets dim,
 But sweeter than the lids of Juno's eyes
 Or Cytherea's breath; pale primroses,
 That die unmarried, ere they can behold
 Bright Phoebus in his strength, a malady
 Most incident to maids; bold oxlips and
 The crown imperial; lilies of all kinds
 The flower-de-luce being one.

—Act IV., s. 3, l. 116 et seq.

As has so often been pointed out, she keeps precisely to the order of the season, while Milton, in a like passage, flagrantly violates the calendar of nature.

Mr. Hamilton Wright Mabie has made the interesting discovery, that there is only one place near Stratford:

Whereon the wild thyme blows.
 —“M. N. D.,” A. II., s. 1, l. 249.

and that it is a bank along the path to Shottery. If we may judge by the context of this passage, the associations coupled in Shakespeare's mind with this path, and bank, were not nearly so unpleasant as some commentators would have us believe.

The subtleties of trees' growth and habits, their characteristics and individualities, have not been lost on Shakespeare. He notes the reflection where

There is a willow grows aslant a brook
 That shows his hoar leaves in the glassy stream.
 —“Hamlet,” Act IV., s. 7, l. 167-8.

Only the under side of the willow's leaves are hoar; again Shakespeare's statement is perfectly exact. In the “Rape of Lucrece” we have

The cedar stoops not to the base shrub's foot
 But low shrubs wither at the cedar's root.
 —“Lucrece,” l. 664-5.

which observation must always please the geographical botanist.

Shakespeare, while so widely conversant with the minutiae of nature, was not blind or indifferent to her broader aspects. For these, also, he had an appreciative eye. He noted the pageants of the clouds; the manifold shapes they assume:

Sometimes we see a cloud that's dragonish;
 A vapour sometimes like a bear or lion,
 A tower'd citadel, a pendant rock
 A forked mountain, or blue promontory
 With trees upon't, that nod unto the world
 And mock our eyes with air.

—“*Ant. and Cleo.*,” Act IV., s. 12, l. 3 et seq.

The colorful picture he presents in the lines

When daisies pied and violets blue
 And lady-smocks all silver-white
 And cuckoo buds of yellow hue
 Do paint the meadows with delight.

—“*L. L. L.*,” Act V., s. 2, l. 902 et seq.

is surely a laughing, happy one of spring; while again, what could be more realistic than the autumn he depicts in Sonnet 73:

That time of year . . . behold
 When yellow leaves, or none, or few, do hang
 Upon those boughs which shake against the cold
 Bare ruin'd choirs, where late the sweet birds sang.

These very many nature notes, sprinkled almost uniformly throughout his work, show how intimately the nature lover was associated with the poet in Shakespeare's art. Their quality indicates the patient seeking for the inner reason of things, that is the characteristic of the man of science. Individually the passages please us as does a tinkling chime of silver bells. The striking applications that the dramatist makes of these lines show him, however, a master of his art. Critics assert that certain of these nature passages were independent compositions that were later fitted into the plays and poems where they occur (by their author) in order that they might not be lost. The story of the hunt, in *Lucrece*, is commonly mentioned as an example of such interpolation. Granted that this be true, has any one ever ventured to say that these passages serve no purpose, or that they are inapt? Quite the contrary! It is remarkable enough that, although critics disagree about almost all else, on this one point they stand united: Shakespeare's similes and metaphors are always appropriate and clear. The German Shakespeare scholar, Dr. C. C. Hense, has even found himself called upon to defend Shakespeare's unrestrained and literal use of nature truths with such correctness.

If fault can really be found with the poet's usage; Hense's defense of it is bold and convincing. He says:

Man hat wohl von Shakespeare gesagt, das er die Schönheit der Warheit und Wirklichkeit unterordnete. In seiner Verwendung der Naturverhältnisse tritt eine Wahrheit hervor, für welche der delikatere Sinn der späteren Zeit die Empfänglichkeit zum Teil verlor. Die Dichter des Altertums, der Natur näher stehend, vergleichen mit unbefangener Naturfrische Menschen mit Tieren; der tadelnde Beigeschmack, welchen der Vergleich mit gewissen Tieren einschlieszt, war in dem unbefangenen Natursinn der Alten nicht vorherrschend.¹

He then cites passages from Homer, Horace, and other classical authors illustrating the decidedly "unconventional" comparisons they commonly employed. Nor was this appropriateness of Shakespeare's nature references confined to the minutiae of his work. To quote another German author, H. Heine, every drama has

Sein besonderes Clima, seine bestimmte Jahreszeit, und seine lokalen Eigen-tümlichkeiten. Wie die Personen in jedem dieser Dramen, so hat auch der Boden und der Himmel, der darin sichtbar wird, eine besondere Physiognomie.²

Thus we have the action of Romeo and Juliet taking place in sunny Verona, while Hamlet and Macbeth live their tragic lives under the gloom and fog of northern skies.

Turn now from the poet's written interpretation of his feeling and observations to a contemplation of the man himself, as revealed by those lines. Shakespeare, the nature lover—this phrase in itself expresses one of the most delightful conceptions we have in the history of literature. The conception is all the more pleasing if we accept the conclusions drawn by Mr. C. Creighton in his curious book entitled "Shakespeare's Story of His Life," wherein he attempts to unravel the biography from allusions in the poet's work. According to it Shakespeare's life in large part must have been very unhappy, for it is a tale of naught but quarrels, disappointed ambition and heartburnings arising from misplaced friendships. In any case, although he did not avoid society as did Thoreau, Shakespeare's joy in a secluded footpath must have been great, particularly if he was so unhappy in his social life.

Imagine how his heart must have surged and expanded away from public haunt, finding

Tongues in trees, books in the running brooks
Sermons in stones, and good in everything.

—“As Y. L. It,” Act II., s. 1, l. 16–17.

¹ It is true that Shakespeare has been accused of subordinating beauty to truth and realism. This is only so because in his nature references a verity is apparent that a later generation has in part lost its ability to appreciate owing to the development of a greater fastidiousness. The classical poets, in closer touch with nature, compared man with the beasts in a very unconstrained and naïve fashion. Because of their unconventional attitude toward nature these early writers were not dominated by a number of modern taboos, including that of comparisons with certain animals.

² Its suited climate, appropriate season, and local peculiarities. As the characters in every one of these plays, so also the earth and sky depicted therein, have each their distinctive and characteristic aspects.

“Good in everything.” What an amount of satisfaction may be expressed by the word good. We feel its real force, now, better, when we hear “goodly”: “a goodly sight it was. . . .”

One thing which must always make us happy is that we may feel reasonably sure that the poet spent the last few years of his life at his boyhood home, and that he could in those years satisfy the longing so feelingly expressed in the lines:

O God! methinks it were a happy life,
To be no better than a homely swain;
To sit upon a hill, as I do now,
To carve out dials quaintly, point by point,
.
Ah! what a life were this! how sweet! how lovely!
Would bring white hairs unto a quiet grave.

—“Henry VI.,” Pt. 3, Act II., s. 5, l. 21 etc.